

proximate a position corresponding to a trailing end of the self-expanding stent, and a third marker band between the first and second marker bands, and
an outer member positioned about the tubular member; the outer member being slidable relative to the tubular member in an axial direction; and
an inflatable device provided on the catheter and positioned proximate the distal end.

a1
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2. (Amended) The combination of claim 29, wherein the catheter includes a tubular member and an outer member coaxially positioned about the tubular member, the outer member being slidable relative to the tubular member in an axial direction.

Sub B2
3. (Amended) The delivery system of claim 1, wherein the outer member is configured to retain a self-expanding stent in a radially-compressed position and to release the self-expanding stent to a radially-expanded position.

a2
5. (Amended) The delivery system of claim 1, further comprising a loading funnel, the loading funnel configured to be removably attachable to the distal end of the tubular member.

a3
SubC1
7. (Amended) The delivery system of claim 1, further comprising a spacing jacket coaxially positioned about the tubular member and inside the outer member.

16 or 17
8. (Amended) The delivery system of claim 1, further comprising a fluid port, the fluid port configured to receive a fluid and direct the fluid to a region between the tubular member and outer member.

9. (Amended) The delivery system of claim 1, wherein the distal end of the tubular member includes a tapered tip.

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Sub C1
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11. (Amended) The delivery system of claim 1, wherein the third marker band indicates a position corresponding to a re-constrain limit of a partially-expanded, self-expanding stent.

12. (Amended) The delivery system of claim 1, wherein the tubular member defines a first lumen and a second lumen, one of the first lumen and the second lumen configured to receive a guidewire, and the other of the first lumen and the second lumen providing a fluid passage to the inflatable device.

13. (Amended) The delivery system of claim 1, wherein at least one of the first, second, and third marker bands is a radiopaque marker band.

14. (Amended) The delivery system of claim 1, further comprising a holding sleeve provided on the tubular member and configured to hold a self-expanding stent, the holding sleeve being spaced from the distal end of the catheter.

16. (Amended) In combination, a self-expanding stent and a delivery system for the self-expanding stent, the combination comprising:

the delivery system of claim 1; and

a self-expanding stent mounted on the delivery system.

17. (Amended) A method for implantation of a self-expanding stent, the method comprising:

providing a delivery system including a self-expanding stent, a catheter having a distal end and being configured to retain the self-expanding stent proximate the distal end, and an inflatable device provided on the catheter and positioned beneath at least a portion of the self-expanding stent;

delivering the delivery system to a region of a vessel to be repaired;

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implanting the self-expanding stent into a wall of the vessel to be repaired;
and
inflating the inflatable device to assist expansion of the self-expanding
stent.

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29. (New) In combination, a self-expanding stent and a delivery system for the self-expanding stent, the combination comprising:
a self-expanding stent;
a catheter having a distal end, the catheter being configured to retain the self-expanding stent proximate the distal end; and
an inflatable device provided on the catheter, at least a portion of the self-expanding stent overlapping at least a portion of the inflatable device.

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Sub C1

30. (New) The combination of claim 2, wherein the outer member is configured to retain the self-expanding stent in a radially-compressed position and to release the self-expanding stent to a radially-expanded position.

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B5

31. (New) The combination of claim 2, further comprising a loading funnel, the loading funnel configured to be removably attachable to the distal end of the tubular member.

32. (New) The combination of claim 2, further comprising a spacing jacket coaxially positioned about the tubular member and inside the outer member.

33. (New) The combination of claim 2, wherein the tubular member includes a first marker band indicating a position corresponding to a proximal end of the self-expanding stent, a second marker band indicating a position corresponding to a re-constrain limit of the self-expanding stent when in a partially-expanded state, and a third

Sub C1
marker band indicating a position corresponding to a distal end of the self-expanding stent, the third marker band positioned nearest the distal end of the tubular member and the second marker band positioned between the first marker band and the third marker band.

34. (New) The combination of claim 2, wherein the tubular member defines a first lumen and a second lumen, one of the first lumen and the second lumen configured to receive a guidewire, and the other of the first lumen and the second lumen providing a fluid passage to the inflatable device.

35. (New) The combination of claim 2, further comprising a holding sleeve provided on the tubular member and configured to hold a self-expanding stent, the holding sleeve being spaced from the distal end of the catheter.

36. (New) A delivery system for a self-expanding stent, the delivery system comprising:

a catheter having a distal end, the catheter being configured to retain a self-expanding stent proximate the distal end;

an inflatable device provided on the catheter and positioned proximate the distal end; and

a loading funnel configured to be removably attachable to the distal end of the catheter.

37. (New) The delivery system of claim 36, wherein the catheter includes a tubular member and an outer member positioned about the tubular member, the outer member being slidable relative to the tubular member in an axial direction.

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Sub C1
38. (New) The delivery system of claim 37, wherein the loading funnel is configured to assist with radial compression of the self-expanding stent and advancement of the self-expanding stent within the outer member.

39. (New) The delivery system of claim 37, further comprising a spacing jacket coaxially positioned about the tubular member and inside the outer member.

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40. (New) The delivery system of claim 37, wherein the tubular member includes a first marker band indicating a position corresponding to a proximal end of a self-expanding stent, a second marker band indicating a position corresponding to a re-constrain limit of a partially-expanded, self-expanding stent, and a third marker band indicating a position corresponding to a distal end of a self-expanding stent, the third marker band positioned nearest the distal end of the tubular member and the second marker band positioned between the first marker band and the third marker band.

41. (New) The delivery system of claim 37, wherein the tubular member defines a first lumen and a second lumen, one of the first lumen and the second lumen configured to receive a guidewire, and the other of the first lumen and the second lumen providing a fluid passage to the inflatable device.

42. (New) The delivery system of claim 37, further comprising a holding sleeve provided on the tubular member and configured to hold a self-expanding stent, the holding sleeve being spaced from the distal end of the catheter.

43. (New) In combination, a self-expanding stent and a delivery system for the self-expanding stent, the combination comprising:

the delivery system of claim 36; and

a self-expanding stent mounted on the delivery system.

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